

Title (en)
Data shift register

Title (de)
Datenschieberegister

Title (fr)
Registre de données à décalage

Publication
EP 1089085 A1 20010404 (EN)

Application
EP 00308376 A 20000925

Priority
US 41161499 A 19991001

Abstract (en)
A system and method for communicating with an integrated circuit is provided that allows an integrated circuit to communicate debugging information and system bus transaction information with an external system. The system may include an interface protocol that provides flow control between the integrated circuit and the external system. The system may include a high-speed link and/or a JTAG link for communicating information. A link may be automatically selected by a debug circuit, or selected by an on-chip device or external system. The high-speed link enables real-time collection of trace information. Links may be memory-mapped, such that on-chip devices and other devices attached to the system bus may access the external system. The high-speed link may also operate at a rate which is integrally coupled with a rate of the processor or system bus. Further, the high-speed link may be adapted to change speeds in response to a change in operating speed of the system bus or processor. The JTAG interface may utilize standard JTAG components and instructions such that external devices such as debug adaptors adopting these components and instructions may be re-used for different integrated circuit types. Information transmitted over the JTAG or high-speed link may be compressed to optimize available bandwidth of the links. Also, processor control signals can be transferred through links that allow an external system to manipulate and monitor operation of the processor and its associated modules. <IMAGE>

IPC 1-7
G01R 31/3185; **G11C 29/00**

IPC 8 full level
G01R 31/3185 (2006.01); **G11C 29/00** (2006.01); **G11C 29/32** (2006.01)

CPC (source: EP US)
G01R 31/318533 (2013.01 - EP US); **G06F 11/3656** (2013.01 - EP US); **G11C 29/003** (2013.01 - EP US); **G11C 29/32** (2013.01 - EP US)

Citation (search report)
[X] US 5606566 A 19970225 - WHETSEL LEE D [US]

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EP2575048A1; CN103034606A; CN112292670A; JP2021531530A; US8615610B2; US7702964B2; WO2005112040A1; US10789153B2; WO2019195149A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1089085 A1 20010404; **EP 1089085 B1 20050810**; DE 60021819 D1 20050915; US 6665816 B1 20031216

DOCDB simple family (application)
EP 00308376 A 20000925; DE 60021819 T 20000925; US 41161499 A 19991001